

MARINE Commercial N40

N40 250 E

169 kW

Rating type B1:	169 kW (230 HP) @ 2800 rpm
Rating type B:	147 kW (200 HP) @ 2800 rpm
Rating type C:	110 kW (150 HP) @ 2800 rpm
Rating type C:	74 kW (100 HP) @ 2800 rpm

SPECIFICATIONS

Thermodynamic cycle	Diesel 4 stroke
Air Feeding	TCA
Cylinders arrangement	4L
Bore x Stroke	millimeters 102 x 120
Total displacement	liters 3.9
Valves per cylinder	number 4
Cooling System	liquid
Direction of Rotation (viewed facing flywheel)	CCW
Engine management	by EDC (Electronic Diesel Control)
Injection System	CR

STANDARD CONFIGURATION

Flywheel housing	type	SAE 3
Flywheel size	inch	11" ½
Air filter		rear side
Turbocharger	Fixed Geometry (water cooled) Turbo with Aftercooler (TCA)	
Heat exchanger		tube type
Exhaust gas water mixer - Exhaust cooled elbow		-
Water charge tank		included
Fuel filter	number	1
Fuel prefilter		included (loose)
Fuel pump		included
Oil filter	number	1
Oil sump		aluminium
Oil vapours blow-by circuit		rear
Oil heat exchanger		built in the crankcase
Oil filler		by cylinder head cover
Starter		12V - 3kW
Alternator		12 V - 90 A
Engine stop device		by electronic central unit
Wiring harness		with negative to ground connection
Painting color		white "ICE"

WEIGHT AND DIMENSIONS

Dimensions (L x W x H)	mm	850 x 780 x 785
Dry Weight	Kg	490

DIMENSIONS CAN BE CHANGED ACCORDING TO ENGINE OPTIONS



COMMERCIAL

IMAGES SHOWN ARE FOR ILLUSTRATION PURPOSE ONLY

ELECTRICAL SYSTEM

Voltage	V	12
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NOT INCLUDED IN STANDARD CONFIGURATION

Battery - minimum capacity recommended	Ah	120 Ah
Battery - minimum cold cranking capacity recommended	Ah	900 Ah

LEGEND

Arrangement	Air Handling	Turbocharger	Injection System	Exhaust System
L (in line)	TC (Turbocharged)	WG (Wastegate)	M (Mechanical)	EGR (Exhaust Gas Recirculation)
V (90° "V" configuration)	NA (Naturally Aspirated)	VGT (Variable Geometry Turbocharger)	CR (Common Rail)	SCR (Selective Catalytic Reduction)
	TCA (Turbocharged with aftercooler)	TST (Twin Stage Turbocharger)	EUI (Electronic Unit Injector)	
			MPI (Multi Point Injection)	

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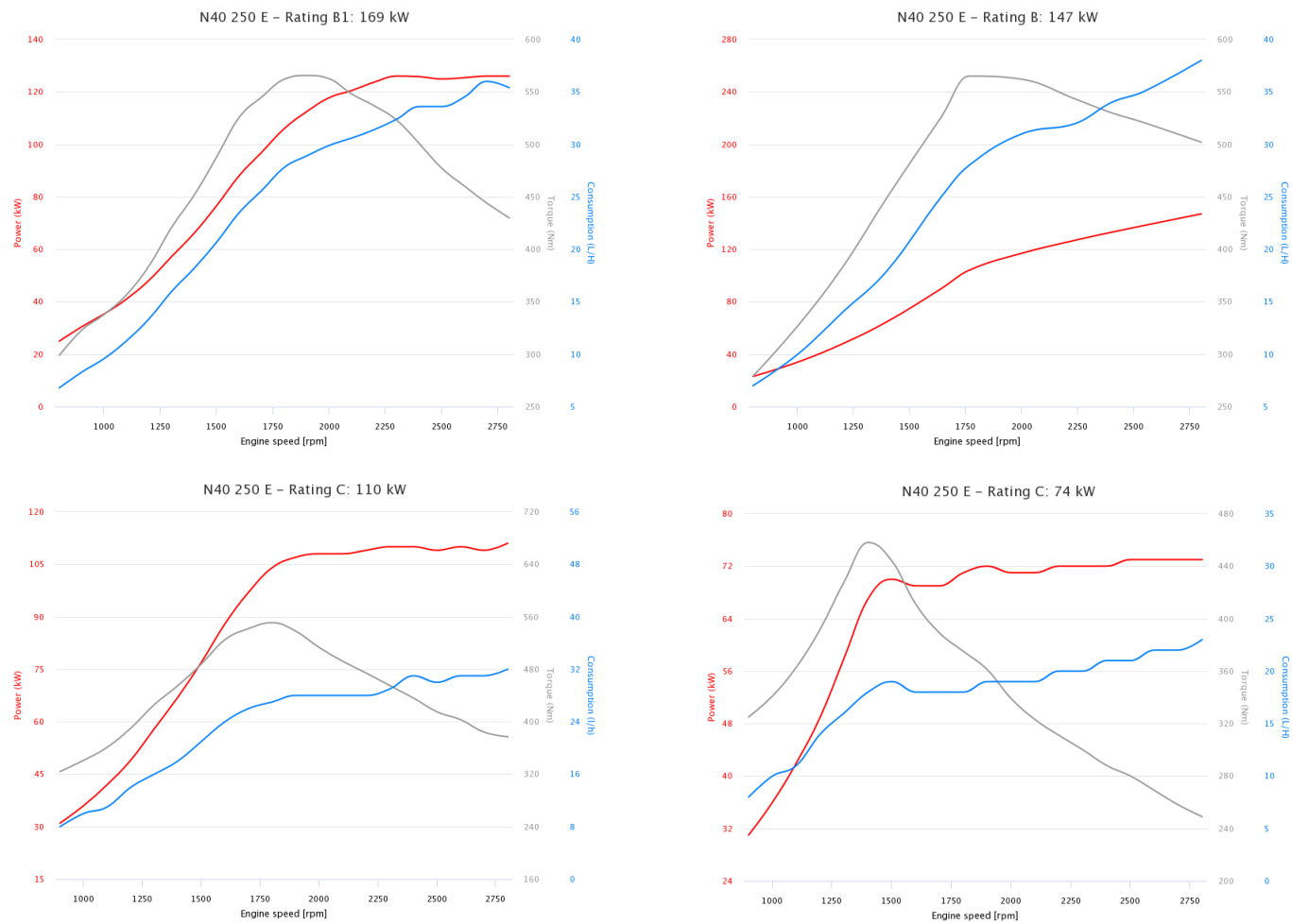
A1 High Performance Crafts. Full throttle operation restricted within 10% of total use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum usage 300 hours per year.
A2/B1 Pleasure Commercial Vessels. Full throttle operation restricted within 10% of total use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum usage 1000 hours per year.
B Light Duty: Full throttle operation restricted within 10% of use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum usage 1500 hours per year.
C Medium Duty: Full throttle operation < 25% of use period. Cruising speed at engine rpm <90% of rated speed setting - Maximum usage 3000 hours per year.
D Heavy Duty

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SPECIFICATION SUBJECT TO CHANGE WITHOUT NOTICE



RATING TYPE		B1	B	C	C
Maximum power [*]	kW (HP)	169 (230)	147 (200)	110 (150)	74 (100)
At speed	rpm	2800	2800	2800	2800
Maximum no load governed speed at max rating	rpm	3000	3000	3000	3000
Minimum idling speed	rpm	700	700	700	700
Mean piston speed at rated speed	m/s	11.2	11.2	11.2	11.2
BMEP at max power	bar	18.7	18.3	15.6	18.3
Specific fuel consumption (best value)	g/kWh @ rpm	235@ 2400	216.7 @ 2400	241 @ 2400	296 @ 2400
IMO Marpol Tier 2 (IMO Annex VI Technical Code 2008)		✓	-	-	-
RCD Stage 2 (2013/53/EC)		✓	-	✓	✓
IWW Stage V (EU 2016/1628)		-	-	-	-
EPA Tier 3 Commercial		-	-	-	-
EPA Tier 3 Recreational		-	-	-	-
China GB I (GB15097-2016)		-	-	-	-
China GB II (GB15097-2016)		-	-	-	-
Oil consumption at max rating	(% of fuel cons.)	< 0.1	< 0.1	< 0.1	< 0.1
Minimum starting temperature without auxiliaries	°C	-10°	-10°	-10°	-10°
Oil and oil filter maintenance interval for replacement	hours	600	600	600	600
* Net Power at flywheel according to ISO 8665, after 50 hours running, Fuel Diesel EN 590. Power tolerance 5%.					

POWER & TORQUE



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